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Globalization: Hercules Meets Buddha

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Globalization of business seems to be a *fait accompli*, a truism no longer questioned: *corporations have to be global in their business*. This claim reflects the era in which it was written as the opening sentence in this Introduction. We think it critical to ask, though, is it still true, or has globalization reached its zenith and is now set to contract?

The planning for this book and the development of its structure started in February 2001. At that time, even though the dot.com bubble had burst and the economies of the United States and other countries had slowed considerably, there was still a belief in the inevitability of globalization. The manuscript was finished in April 2003. Two historic events took place between those dates that could affect the course of globalization: the September 11 attack on the World Trade Center and the war in Iraq. Many observers had started asking how these events would affect the conduct of business. Would the juggernaut of globalization continue or would companies pull back into “safe” countries or possibly retrench within their own borders?¹ Worst-case scenarios included a reduction in immigration into the United States, resulting in fewer students and potential employees, thus reducing innovation; tensions between the United States and Europe and within Europe making trade liberalization more difficult; product boycotts; and terrorism and increased security complicating outsourcing and increasing uncertainty.²

On top of the threat of terrorism and the unknown aftermath of the war was an outbreak of a new “global disease,” Severe Acute Respiratory Syndrome (SARS), that was affecting travel particularly to China and Hong Kong. Continental Airlines suspended all flights to Hong Kong and other carriers sharply reduced their schedules. Some companies restricted or banned travel to East Asia and supply-chain disruptions were feared.³ Conducting business globally was becoming more uncertain and more difficult.

Are multilateralism in foreign affairs and globalization in business, which depends on multilateral relations, finished? Multilateralism and globalization have brought benefits to many countries and peoples of the world. Will they retain the same format in the future as they had prior to the war in Iraq or keep to the same trajectories they were following? Undoubtedly, the global political and economic systems will change. As this book nears

its completion, the nature and impact of future changes can only be speculated about, not predicted with any certainty.

Our crystal ball is no clearer than those of others, and trying to make specific predictions about governments' or companies' actions is a risky business. The prospect of terrorism, the aftermath of the war, and "global diseases" are factors that will contribute to increasing uncertainty in the environment facing executives in global companies. If anything, their job is going to become harder. The world is not becoming simpler and easier; it seems to be becoming more complex and difficult, or, perhaps, we are being forced to recognize its complexity. Larry Ellison, CEO of Oracle Corp., was quoted as saying "It's a dangerous world. We had this amazing 10-year period [the 1990s] when we pretended it wasn't."⁴

Managing in a complex international arena that is rapidly changing is the theme of this book. We believe that the events since September 11, 2001 reaffirm our perspective of globalization as complexity – a characteristic that is likely to endure. As British Prime Minister Tony Blair said, "We are all internationalists now, whether we like it or not."⁵ Executives need to embrace this perspective more than ever, understand more fully the complexity with which they are dealing, and learn to cope more effectively with it.

The banality of the term "globalization" masks the reality of what it means, obscuring the important issues of doing business globally with success. Things are not going smoothly in corporate globalization, and many efforts fail to meet expectations. Globalizing a company is more complicated than we anticipated. It is easy to talk about and aspire to, but difficult to achieve. This book responds to the challenge that today's managers face. It offers a different look at what globalization means and how to respond to it. We draw on the latest research on managing global organizations, extensive experiences with a broad spectrum of international companies, and integrative dialogue with academics and executives about effective management. Our goal is to understand the globalization process more completely – to explain it or "unpack" it to see what is really there and how it affects managing.

Rather than define globalization as the proportion of trade conducted across national borders, or by some other economic or social measure, we argue that, as we talk about it in business, globalization is a manifestation of complexity. Understand its complexity, and you will understand globalization. Understand the processes necessary to deal with complexity, and you will understand what is necessary to globalize an organization.

The complexity of globalization flows from conditions of multiplicity, interdependence, and ambiguity, all of which are interrelated. These conditions in turn are in a state of constant change or flux. In complex environments, predicting the future is impossible and trying to rigidly control global organizational outcomes may be dysfunctional. Complexity of this type cannot be controlled. But it can be managed – or at least channeled – to create functional and even valuable organizational outcomes.

Managing complexity requires a new way of thinking. In addition to focusing on factors such as the organization's design, detailed lists of assets and financial projections, today's global executives must learn to manage their organizational processes. The key processes in a global organization are collaborating, discovering, architecting, and systems thinking. And the key element to channeling or managing complexity lies in the connective glue that binds the processes to complexity: people. Our model for managing these processes in organizations is shown in figure 1.1.

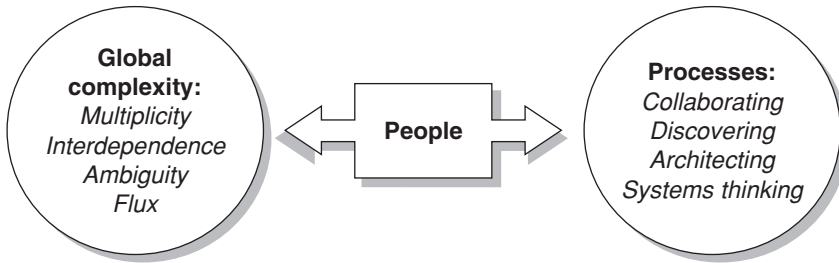


FIGURE 1.1 Managing global complexity⁶

We think about executives in the modern global corporation as being like Hercules, the Greek hero. The stories of his exploits, The Twelve Labors of Hercules, are accounts of his use of strength and power to overcome obstacles on his path to atonement and fame.⁷ Hercules is the embodiment of what the Greeks call *pathos*, virtuous struggle and suffering that leads to fame.⁸ The heroic Hercules model originates in the home of Western civilization, Greece. Greece is the cradle of Western rational thought, a cognitive model that encourages our use of comparison, measurement, categorization, and analysis in understanding the world around us.⁹ We argue that such an analytic, strength-based mode of thinking and doing may not be sufficient in the complex environment we call globalization and should be augmented with other ways of comprehending the phenomena we find in our environment and with new techniques for meeting its challenges.

Western rational thought is not the only mode of understanding the world and our place in it.¹⁰ The Eastern way of “seeing and understanding” as presented in Buddhism and Taoism seeks to go beyond the world of categories, opposites, and analysis to achieve true understanding of a world of infinite complexity and variety. Two of the basic tenets of the Eastern way are that all things and events are interrelated and that change is constant and natural. The latter was an adaptation of Buddhism as it was absorbed and modified in China to become Taoism. The Tao is the “The Path” or “The Way.” It is the way or process of the universe. Hui Nan Tzu, a Chinese philosopher, described these relationships when he observed: “He who conforms to the course of the Tao, following the natural processes of Heaven and Earth, finds it easy to manage the whole world.”¹¹

Hercules should meet Buddha. The skillful use of management processes will help manage the “whole world’s” complexity. We do not propose managers eliminate rational analytic approaches to management and globalization or perseverance over obstacles in the path in favor of the intuitive wisdom of Eastern mysticism. We do suggest that to globalize successfully, managers’ toolkits and worldviews need to be updated. We must remember that tools such as analytic spreadsheets are not reality, but rather, representations of reality based on an assumed understanding of the characteristics of countries, peoples, and anticipated markets. As Alfred Korzybski said, “the map is not the territory,”¹² and managers must not confuse the two. They must look beyond the tools to see the reality of their environment, to select and combine from the approaches symbolized by Hercules and Buddha. This book is about the importance of understanding more completely and from a different vantage point the global context in which executives find

themselves; about how they can enact processes that fruitfully channel and manage the complexity in globalization to create value.

GLOBALIZATION: DEFINED BY STRUCTURES, MANAGED BY PROCESSES

Globalization – in terms of international economic integration – has been enabled and characterized by the erosion of boundaries.¹³ Trade liberalization has opened borders across which capital moves easily. One of the most notable features of the new world economy has been the closer interconnection among countries of the developed and developing world: “The great novelty of the current era is the extent to which the poorer nations of the world have been incorporated in the global system of trade, finance and production as partners and market participants rather than colonial dependencies.”¹⁴

A second feature of globalization as boundary erosion has been the relaxation of foreign direct investment (FDI) restrictions. During the 1990s there were over a thousand changes around the world to national laws governing FDI; almost all of them had the effect of creating a climate more favorable to it.¹⁵ These changes were complemented by an increase in bilateral investment treaties: in 1980 there were fewer than two hundred bilateral treaties in existence, while at the end of 1999 there were almost two thousand.¹⁶

Airline travel and reliable, inexpensive communications have shrunk the globe so effectively – diminishing physical boundaries – that corporations are now able to manage far-flung operations. The UN estimates that there are 63,000 transnational corporations, and that these companies have 690,000 foreign affiliates spanning “virtually all countries and economic activities.” The foreign affiliates of the top 100 of these firms employ over six million people around the world.¹⁷ In addition, more recently the emergence of information services and the addition of new technologies such as the Internet have dramatically accelerated the globalization process. It is possible to do business in Asia through a website without leaving Paris.

Both responding to and feeding the trend of boundary erosion, companies are rapidly trying to globalize. Why? Because growth is coming from international markets and new ideas and innovations are springing up in companies around the world. In the increasingly competitive market, this search for growth must be increasingly far-flung. For years, companies restructured and systematically wrung costs out of operations to improve profitability, to capture market share, or to stay in business. As these efforts achieved their ends, new areas of opportunity for increasing profits had to be found. They began to work across boundaries – internal product/service boundaries and national borders. Internally they developed new products and services and began selling “solutions.” Many companies moved from a strategy of “best product” to “total customer solutions.”¹⁸ International markets also provided growth. As foreign firms entered a market, local companies had to adapt and they began expanding internationally to remain competitive in an increasingly complex global marketplace. The quest for growth has become continual, demanded by financial markets and shareholders. And international markets are where opportunities for growth are. Some companies continue to search for growth by expanding into new international markets and some are searching for it from innovations to be achieved by integrating and expanding their current global operations.

In many industries these efforts mean that more capital and greater size are necessary to operate in the global marketplace. To obtain this capital and size, companies engage in more alliances, mergers, and acquisitions, leading to a consolidation of industries. Even large, established companies – that traditionally acquired smaller companies but only competed against others their own size – are now increasingly seeking alliances and mergers with other large companies to gain complementary assets and competencies. The total number of mergers and acquisitions worldwide grew at 42 percent annually between 1980 and 1999.¹⁹

Consolidation is taking place across borders as well as within countries. Of the 42 percent growth rate in M&As, 25 percent (in number and value) were cross-border deals. Some examples that have commanded attention include Pharmacia-Upjohn and Pharmacia-Monsanto,²⁰ DaimlerChrysler, Ford's purchase of Jaguar and Volvo, GM's acquisition of Saab, Terra Networks' (Spain) acquisition of US-based Lycos, and the French Vivendi's purchase of numerous companies in North America, including Universal Studios, which was owned by the Canadian company, Seagram's. Vivendi bought Seagram's in order to acquire Universal.

Clearly, the forces of deregulation, consolidation, and technology are reshaping corporate and social landscapes. The UN states:

And just as the earlier boom in the United States contributed to the emergence of a national market for goods and services and a national production system, complemented by a national market for firms, so is the current international boom reinforcing the emergence of a global market for goods and services and the emergence of an international production system.²¹

This is the phenomenon that Levitt, a pioneering observer of globalization, wrote about in the early 1980s. He defined globalization as a “shift toward a more integrated and interdependent world economy . . . having two main components: the globalization of markets and the globalization of production.”²² Many academics and executives have taken their cue about the nature and course of globalization from Levitt by, for example, defining globalization as simply “the production and distribution of products and services of a homogeneous type and quality on a worldwide basis.”²³ The globalization of markets usually “refers to the merging of historically distinct and separate markets into one huge global marketplace” and the globalization of production is explained as the sourcing of “goods and services from locations around the globe to take advantage of national differences in the cost and quality of factors of production.”²⁴ Many managers discredited Levitt's ideas, interpreting his prescriptive statements in simple ways. In fact, Levitt's thoughts may have preceded managerial capabilities. These managers applied simple solutions to their firm's globalization efforts, often with disastrous results.

The statistics about globalization are impressive, as is the image of large, cost-efficient firms developing standard products and selling them throughout the world, which has become common.²⁵ Similarly, the image of a world converging to sameness and firms becoming more important than governments often is also communicated, intentionally or unintentionally, with this perspective.

But is globalization a reality? Or has the reality been misperceived, the numbers misinterpreted, and a myth created? Not everyone agrees with the standard globalization picture described above. Rugman and Moore, for example, argue that “globalization is a

myth.” They show that large firms’ business activities and their trade in goods and services take place not globally but in clusters (for example, Silicon Valley, Hollywood, Grenoble), regional blocks (for example, the European Union, NAFTA, Japan), and within nations. Their advice is to “think regional, act local and forget global.”²⁶ We note that if globalization is defined by standard terms, then in reality there are few, if any, truly global companies operating in all markets.

Descriptions of globalization are like the descriptions of the proverbial elephant made by the blind men who each touched different parts of the animal: the descriptions are accurate as far as they go. Yet they do not describe the elephant, only some of its parts. Most of the globalization descriptions include an increasingly global reach from very narrow perspectives. This may mean entering new markets, following customers to new countries, establishing new sources of cheaper supplies and/or labor, finding new locations in which to place parts of the value chain, exploiting new sources of intellectual capital (knowledge), and reaching into new locations electronically through the Internet. However, such perspectives are firm-centric views. They suggest that companies and executives simply are doing more of what they have always done, just in more places and with more technological sophistication. These perspectives are economic, market-oriented and technology-oriented ones that, although not incorrect, describe only a part of the reality.

We suggest that we need to focus on the *processes* of globalizing in order to fully grasp the elephant. When we examine the processes companies undertake as they globalize, we lose the sterile statistics and see the people who create and manage the trends. This picture at the doing/implementation level is often much less rosy than the ones given by macro-level descriptions. The sailing is not smooth and many efforts fail. The road to globalization is strewn with the debris of ill-considered mergers, acquisitions, and new market entry attempts. At the same time, it is also strewn with exceptional learning, innovation, and opportunities.

Globalization is about complexity. It is first about accepting and characterizing the complexity, and also about managing – or at least channeling – the complexity by using fluid processes.

THE CONDITIONS OF COMPLEXITY

As companies expand their global reach, increasingly they encounter organizations and governments that influence their operations or claim jurisdiction over their corporate activities. The current corporate environment is a *mélange* of global competitors, multiple countries, and governments with differing social, legal, regulatory and political constraints and physical infrastructures; numerous cultures and languages; all facilitated by technology and more tightly linked than ever in the past. This situation makes management – in terms of control over defining paths to desired outcomes – more complicated and less predictable than in the past.

We have identified three characteristics which together function as a foundation for the increasing complexity of globalization: multiplicity, interdependence, and ambiguity. Each of these characteristics is difficult to manage by itself, and combining them presents even more challenges. As if that were not enough, each of them is always shifting. The entire

network of complexity is in a state of constant flux. No wonder global managers are bewildered! Unpacking complexity's components is the first step to linking complexity with the processes to manage it.

Condition 1: Multiplicity – many voices, viewpoints and constraints

Multiplicity is our shorthand concept for recognizing that corporations face many different models for organizing and conducting business, and in fact for functioning globally in general. With globalization, executives deal with more organizations, governments, and people. Importantly, though, many of these entities are also different from the executive's own organization, government, and people, and from each other as well. Globalization is not just about "more"; it's about "more *and* different." This is the multiplicity aspect of complexity.

Multiplicity of competitors

Some companies notice globalization first when they experience multiplicity in their competitive environment. Grocery shopping, for example, has traditionally been dominated by local players who know the market well. Domestic grocery stores in most countries around the world, though, have recently begun to face competitors from abroad who play the game quite differently. In the Boston area, two of the three largest supermarket chains are owned by J. Sainsbury plc of the United Kingdom, which has established a major presence in the Northeast United States. The third is owned by Royal Ahold of the Netherlands. With worldwide sales of 67 billion euros in 2001, Royal Ahold has 450,000 employees in 9,000 stores serving 40 million customers every week in 28 countries on four continents.²⁷ Local Boston grocery stores, even without "globalizing" themselves, are now competing with the multiplicity associated with globalization of their industry.

Multiplicity of customers

Royal Ahold and J. Sainsbury plc, as multinationals operating in many environments around the world, also face multiplicity in their customers. Customers in different countries, regions, or demographic groups have different priorities and preferences, and customers in developing markets differ significantly in their needs and desires from those in developed markets.²⁸

Very few consumer products are global – even Coca Cola and McDonald's change their formula and menu for different parts of the world, and Nokia and Sony put different features in their products for different markets. Business-to-business firms, too, face different customers in different parts of the world. When BASF, the chemical company, sells products to DaimlerChrysler, a large automobile manufacturer, it usually negotiates a global contract with headquarters, then provides delivery and after-sales service locally to local production units. BASF therefore deals with many types of customers even within the same buyer firm. Because of multiplicity in customers – their culture, environmental context, traditions, and so on – many organizations begin to globalize with local distribution or sales units, and perhaps local production. Even those organizations with more integration across global units, though, must manage their broad scope of customers.

Multiplicity along the value chain

Two fundamental forces influence companies operating in multiple, national markets: those pushing toward *global integration* and those pulling toward *local responsiveness*.²⁹ Forces for global integration push companies to minimize duplication of efforts and increase efficiencies by placing specific value-chain activities in appropriate locations around the world. This allows them to capitalize on the interaction between the company's competitive advantage in the particular activity and the country's locational comparative advantage for such an activity.³⁰ Easier movement of capital and reduced transportation and communication costs facilitate splitting up a corporation's value chain, and today's firms find that strategic placement of the value-chain activities is necessary for survival.³¹

For example, consider EMC, a leader in data storage networks. Its head office is in Massachusetts; it conducts R&D in the United States, Israel, and France; it manufactures systems in Ireland and the United States; and has over 5000 direct service personnel located in the United States, France, Brazil, Ireland, Germany, Japan, and Australia. If EMC is not complicated enough, consider Schneider Electric. Headquartered in France, it has organized to be close to its customers. The result is that it has more than 7,400 sales outlets, 620 marketing facilities and 150 manufacturing facilities in 130 countries. The 3,000 members of its R&D departments operate in 15 countries.³² In managing their value chains, both EMC and Schneider Electric operate in multiple environments, each one with a different infrastructure. To be effective they must take these multiple contexts into account.

Multiplicity of governments

In July 2001, the European Union rejected General Electric's proposed \$42 billion acquisition of Honeywell. The two companies officially called off the proposed merger in October 2001. Commenting on the ability of the European Union to halt a merger of two US companies, *TIME* World Editor Michael Elliott commented: "Welcome to globalization. The collapse of the GE-Honeywell merger shows that companies that benefit from a global market can now be governed in all they do by any of the countries or regions in which they do business. . . . We'd all better get used to it."³³ Jack Welch, former CEO of General Electric, when asked why Europeans can influence a merger between American companies, said, "That's the law. That really is just the way the world works."³⁴

In fact, the EU and US authorities can block any merger or acquisition regardless of the nationalities involved, as long as the result is significant for its own market. Significance is usually defined in terms of open market access and impact on the customer or consumer, rather than using market share statistics per se.³⁵ Although this was the first time that a proposed merger between two US companies had been blocked solely by European regulators, a year earlier the US authorities blocked the Air Liquide (French) acquisition of British Oxygen.³⁶ Regarding the GE-Honeywell merger, the EU felt considerable political pressure when the US authorities waved the merger through with hardly any analysis and GE executives clearly – and publicly – expected the EU to follow suit. GE employed 85,000 people in Europe and had \$25 billion in European revenue in 2001; furthermore, the EU was concerned about further consolidation in the aerospace industry. The EU believed the merger was unwise, and blocked it.

This exposure to foreign laws and intervention is a reality in cyberspace as well. Yahoo is the second leading Internet portal in the world and the leader in establishing overseas operations. In 2001, Yahoo had 24 international sites in 13 languages and approximately 40 per cent of its users were located outside the United States. Many governments, especially European ones, were becoming increasingly annoyed with the Internet's free-for-all content, much of which violated local laws. Yahoo, the most visible Internet company in France, soon found itself embroiled in a test case over Internet jurisdiction. In April 2000, *La Ligue Contre le Racisme et l'Antisémitisme* (LICRA), together with the Union of French Jewish Students, filed suit against the US company for allowing users to post-Nazi era memorabilia items for sale on the Yahoo American auction site. Although the site was primarily directed toward American users, the fact that the site could be viewed in France was considered a violation of a French law prohibiting the display of Nazi symbols.

On September 1, 2002, China blocked the search engines Google and Alta Vista with what has been dubbed the "Great Firewall of China," in its attempt to stop access to pornographic and "subversive" material.³⁷ Less than two weeks later, Google was back on line with no explanation.

These examples suggest that even cyberspace is not outside the reach of regulators.

Multiplicity of stakeholders: The power of NGOs

Thousands of non-governmental organizations (NGOs) are monitoring corporate activity around the globe. They include large, well-established groups like Greenpeace, the World Wildlife Fund, Oilwatch, Amnesty International, and Human Rights Watch, as well as numerous smaller groups. NGOs are not new players in the business environment, but they have exploited the Internet more quickly than have some corporations, and their influence is being felt strongly. They have leveraged this technology to bring to light and publicize corporate activity that in the past would have largely gone unnoticed.

NGOs traditionally watch and criticize human rights and environmental issues, and are moving publicly into other areas. The Positive Futures Network and many others speak out against globalization. Opponents of the World Trade Organization (WTO) have disrupted the meetings, protesting against what they see as the non-democratic imposition of globalization. These NGOs are a fixture in corporations' new global reality; they are not going away.

As companies grow globally, they not only face *more* competitors, customers, value-chain locations, governments, and other stakeholders; they face entities that differ from each other in terms of their structure, motivations, and traditions. Managing such multiplicity effectively is part of globalizing.

Condition 2: Interdependence – it's all connected

The second aspect of the complexity we call globalization is interdependence. With fast and easy movement of capital, information, and people, distributed units are no longer isolated. Such interdependence can be simple or complex.³⁸ With simple interdependence, activities may be discrete or, perhaps, move sequentially through a system, such as in a manufacturing assembly line and in routine processing of orders or insurance claims.

When an outcome relies on close interaction and coordination, such as when a process must go back and forth among many units, each making changes that rely on and influence others, interdependence is much more complex. Account teams in advertising and medical teams working on complex surgeries are examples of outcomes that require complex interdependence among various people and units.

In automobile firms, product design was traditionally done sequentially, with one set of engineers handing the work over to the next set until the project was finished. In trying to reduce time-to-market and to improve the designs themselves, the firms moved to more complex designs, beginning the process with a multifunctional team of engineers, marketers, and other professionals (more multiplicity!). Ideally, the team works together incorporating all disciplines all along the design process.

Globalization has created a world of complex interdependence. With fast and easy movement of capital, information, and people, distributed units – organizations or people – cannot be isolated, nor can they assume a simple relationship in a sequential sequence. Furthermore, companies are finding that they *must* enter into interdependent arrangements through outsourcing, alliances, and network arrangements related to their value chains in order to stay price-competitive or continue to create value. Interdependence is not only a feature of the external environment; it also is something companies create themselves to cope with the challenges of the external environment.

Economic interdependence

The currency crises of the 1990s in Asia and Latin America influenced businesses and consumers around the globe through their effects on the financial institutions in North America and Europe. A dramatic example of economic interdependence was the September 11, 2001 attack on the World Trade Center in the United States. Prior to this most people in the West saw little linkage between the United States and Afghanistan. However, on that day the United States and the rest of the developed world realized how interconnected countries in the developing and developed world have become. The attackers, in fact, used this interdependence to create a disturbance, the goal of which was to reduce the interdependence.

The attack had an obvious and immediate impact on the airline and travel industries. But it was not just these frontline businesses that were affected. In fact, the insurance industry was the most affected.³⁹ Take, for example, Chubb Corporation, which writes both property and casualty insurance. It took a \$420 million charge in after-tax income to offset losses due to the September 11 attack. MetLife took a \$208 million charge. Lloyd's of London had substantial insurance coverage of United Airlines, American Airlines, and the World Trade Center. MunichRe and SwissRe, the world's two largest reinsurers, were hit badly as they made payments to the direct insurers. Claims from the World Trade Center attack included property losses, business interruption, workers' compensation, health insurance for non-work-related injuries, life insurance, and automobile insurance for vehicles damaged or destroyed. Other insurance companies, such as Zürich and Aegon, which invest heavily in "safe" equities, saw their stocks plunge as their investment portfolios were affected by post-September 11 market dives. This one event on September 11, 2001 surfaced intricate webs of economic interdependence around the world.

There is a positive side to interdependence. Companies can leverage the interdependence by obtaining capital in one part of the world to finance activities in another. However, they must be aware of the economic interdependence and the extended web of relationships in which they function. The interdependence can have an enormous impact on costs and sales. Companies that ignore their interdependencies may be caught by surprise when events in one part of the world affect their business in another part.

Interdependence along the value chain

As with the automobile design teams, firms have found that it is *possible* to get things done faster and better with cooperation (interdependence), even if it is more difficult. At the extreme, a firm may locate each value-chain activity in the part of the world from which the firm can best serve the rest of its global activities. This creates complex interdependencies among the company's different geographic locations. Such interdependencies usually are among activities that are likely to be situated in culturally different locations and time zones, thus, creating greater managerial challenges to managers than do traditional sequential value-chain arrangements. This also creates a different set of risks, as was shown by the 2002 port strikes on the West Coast of the United States. A ten-day shutdown of product flows caused months of havoc. Finished goods, components for final assembly, and new materials flows were interrupted.

Interdependence in alliances

Companies also contribute to the trend of increased interdependence when they enter deliberately into formal and committed relationships with each other. Corporations that operate globally want partnerships with their suppliers, and they want integrated solutions from these suppliers, not just products. The result is usually closer relationships and greater interconnectedness of operations between firms. Suppliers cope with significant shifts in their customer relationships by changing operating structures and systems. The appearance of networked organizations and global account management structures are indications of this trend.

Xerox and Schneider Electric, one of Xerox's component suppliers for its equipment and manufacturing technologies, created such a relationship.⁴⁰ The two organizations had numerous sets of senior executive meetings that led to a formalized agreement for Schneider to be the preferred supplier for the entire Xerox product line, worldwide. This arrangement had the potential for increasing Schneider Electric's worldwide sales to Xerox; Xerox had the potential for significant cost savings. The organizations provided each other with significant proprietary information, and R&D streams were disclosed so that Schneider could realign product development efforts to fit the future needs of Xerox. Responsibilities at both global and local levels were matched against local and centralized operational bases. France-based Schneider Electric then identified 25 global account managers, including those from its Schneider Electric North America subsidiary, and started training them to function in this new operational mode. This alliance performed very well for both companies for a number of years and illustrates well how companies can benefit from accepting and channeling the complexity associated with interdependence.

Both technology and international trade law have contributed to greater interdependence in global business, and at the same time have allowed companies to use interdependence

to create more value for their firms. Computers and communications technology allow for fast and effective communication of data and dialogue, and trade laws allow for movement of capital and goods. Interdependence contributes to complexity that managers cannot ignore – and in fact must manage – in the process of globalizing.

Condition 3: Ambiguity – what does it mean?

With ambiguity, although there may be plenty of information, the meaning or implications of the information are not clear. It is a condition rife with multiple meanings, incorrect attributions, erroneous interpretations, and conflicting interests. Situations, intentions, corporate actions, and individual behaviors can be interpreted in many different ways, and implications for action are confusing. The problem here is not the need to obtain more information and apply probabilities to the outcomes; that is uncertainty. Ambiguity involves not being able to understand and interpret the data in a way that guides action effectively. Ambiguity goes beyond uncertainty. Three aspects of ambiguity contribute to the complexity of globalization: lack of information clarity, cause–effect relationships, and equivocality.

Lack of information clarity

Information itself can be simply unclear – sometimes we cannot even know “the facts.” For example, reports or statistics from different sources may use different indicators to analyze the same subject, coming to different conclusions. The economic situation often is characterized by this lack of clarity: is the world economy growing, stagnating, or shrinking, and by how much? We may not “know” until June of a given year the economic growth figures for the previous year, and even then, these data are debated by experts. Companies cannot know clearly what their market share is at a given moment: market share depends on how one defines the market. Companies in the distribution system may report sales in different ways (e.g., sales to a wholesaler or to a final customer); and there is almost always a lag (different in different firms) in the time between sales and information gathering. Most people have long thought that financial figures derived by accountants were “correct” and could be interpreted as the clear, true picture of a given company’s situation. The 2001–2 scandals at companies such as Enron, WorldCom, Tyco, and Vivendi have shaken the general public’s faith in these statements. Senior managers have always known, though, that even audited financial statements can be ambiguous. The complexity of today’s financial markets (in both multiplicity and interdependence) has increased the ambiguity in terms of information clarity.

We all prefer to make decisions about future actions based on clear information. This is the approach that Hercules would take. In business, limited resources must be invested in a limited number of projects, changes, and visions. Companies have a very strong need to base these decisions on clear information, or “the facts.” When the facts are unclear, decision-making is very difficult indeed. The most common response to lack of information clarity is to grasp at the facts that do seem to be clear, such as accounting figures, and rely on those. Today’s companies are discovering that this can be a dangerous response, though, and new approaches to managing this type of complexity are needed.

Cause–effect relationships

Another aspect of ambiguity comes from confusion around the relationship between means and ends, inputs and outputs, actions and outcomes. Does one action actually cause what we see as the outcome? Are both caused by something else? A 3M manager commented on three bullet points in a strategic plan: increase market share, increase profits, and increase new product introductions. He identified three possible cause–effect relationships between these objectives: market share leads to profits which provide funds for new product development; new product development leads to both market share and profits; and profits allow new product development which gives higher market share.⁴¹ There are, of course, many other ways in which the three objectives can be related. Each of these different explanations, though, is associated with a different set of priorities and actions.

Consider European mobile telecommunications companies in the 1990–2002 period. According to common industry knowledge, a critical mass of infrastructure and subscriber base causes profitability. Vodafone, BT, and Orange, among others, have acquired smaller players throughout Europe in a race to achieve such “critical mass.” Some have also acquired companies in Asia and the Americas to increase their critical mass even further, as well as to establish a foothold in other markets. The telecoms then discovered that pan-European (or broader international) coverage does not necessarily bring critical mass. Even within Europe, the markets are regulated differently and consumers look for different product benefits. Other international markets are even more different (multiplicity!). Because of this multiplicity, the different parts of the company cannot simply be added together to create critical mass. In fact, the acquisitions disperse management effort so much that the company cannot concentrate on its most important markets. These European telecoms have begun to sell some of their acquisitions. Moreover, given the difficulties of achieving results in smaller markets that they previously thought would flow from critical mass, they are examining other assumed cause–effect relationships in the industry.

Equivocality

Equivocality is a condition in which multiple interpretations of the same facts are possible. With this condition, we have the facts and we can identify two or more things they could possibly mean, but to identify the “right” interpretation is difficult. If the same customers keep purchasing the same brand – a fact which we can establish – does this mean they are loyal to the brand or simply shortcutting cognitive processes and making automatic decisions? The implications for marketing campaigns are important. In the former case we might run a campaign that increases their loyalty, giving them points or discounts, with advertisement that creates links between our product and loyal emotions. In the latter case we might work through the distribution system to ensure that our product is always the easiest to purchase, and not focus at all on loyalty programs.⁴²

Royal Dutch Shell faced a serious equivocality issue with its Brent Spar misadventure. After examining many alternatives for the disposal of its Brent Spar oil platform in the North Sea when it was no longer functioning, the company planned to destroy and sink it. The executives chose this alternative because it was the most environmentally sound

and maximized financial and social responsibilities as much as possible. Shell knew that environmentalists were concerned with the company's activities (fact), and therefore assessed that this alternative would be acceptable (interpretation based on fact). However, Shell executives did not understand the equivocality in the minds of the general public, nor did they completely understand the goals of Greenpeace. Shell managers simply made their decision and proceeded to begin the destruction.

Greenpeace's goal was not only environmental protection in specific incidents, but also the destruction of companies and industries it perceived as harmful to the environment in general. Greenpeace understood the equivocality of the facts in the minds of the general public and used this ambiguity to attack Shell. They saw the counter-intuitive decision about Brent Spar as a perfect opportunity to impose their own clarity upon the ambiguity and strike a blow against Shell. Once the situation was presented in the media by Greenpeace, the general public could not conceive how the sinking of the oil platform could possibly be environmentally sound, no matter how many rational responses Shell made. Environmentalists around the world rose to action with a powerful boycott and Shell eventually canceled the plan.⁴³

One observer commented:

Shell is not going to forget lightly its misadventures with the Brent Spar. The Oil Major was taken by complete surprise when the Greenpeace campaign against sinking that former drill platform achieved its goals. What happened to Shell can in fact happen to any corporation. Losing control of the situation as result of the activities of a pressure group has become a nightmare scenario for the modern multinational enterprise.⁴⁴

We would conclude, more broadly, that with increased multiplicity, especially when such multiplicity represents increased interdependence – which itself creates opportunities for a greater variation in goals, motives, and values – ambiguity is also greater. It is up to managers to address the ambiguity; controlling it is futile. Shell now assigns significant resources to public relations and has implemented a triple bottom line (financial, environmental, and social). The company may find itself in another sticky situation, but it is much better prepared now to manage the ambiguity with processes.

THE MULTIPLIER EFFECT: MULTIPLICITY × INTERDEPENDENCE × AMBIGUITY = DYNAMIC COMPLEXITY

Tightly coupled, complex global organizations operating in tightly coupled, global environments become more vulnerable as their potential for interdependence increases.⁴⁵ The increase in complexity leads to a decrease in buffers, slack resources, and autonomy of units. There also is less time to contemplate corrective action. Ambiguity makes problem diagnosis and action planning difficult, and managerial control is decreased. Problems appear and must be resolved. "Now" has become the primary unit of time in the world of global managers.

If customers, governments, interest groups, competitors, and the physical environment were passive, a corporation could manage the complexity by simply adding more managers, computers, and operations. That would be an increase in detail complexity.⁴⁶ However, globalization is characterized by *dynamic complexity*.⁴⁷ There is simultaneously an

increase in scale of operations and an increase in the interconnectedness among the players who have differing agendas, motives, and goals. Subsystems are interconnected in such a way that cause and effect are no longer easy to determine. The effect of multiplicity is a greater issue because it is accompanied by an increase in interdependence. The increase in interdependence and multiplicity leads to more ambiguity. Ambiguity makes understanding multiplicity difficult. And so on. Such a scenario can create messy situations for executives, but global managers must deal with such situations.

Monsanto, for example, is a company that experienced an increase in complexity when it changed its strategy. It operates in at least two very different markets. The mature market for herbicides is based on chemistry. The new market for genetically engineered crops is based on agricultural biotechnology. With advances in biotechnology, companies like Monsanto⁴⁸ can provide potential solutions to a number of problems faced by farmers. Genetic engineering can make crops resistant to weeds, insects, and disease; increase the nutritional content; produce crops capable of growing in less hospitable environments such as deserts; and increase the shelf life of fruits and vegetables. Theoretically, the increased yields offered by such technologies could help alleviate hunger in developing countries.

There are many different reactions to genetic engineering around the world, ranging from unquestioning support to open hostility (multiplicity). The application of these new technologies will depend on and will influence many social, environmental, and economic factors (interdependence). The long-term impact of genetically modified organisms on humans and on the environment is unclear (ambiguity). Any one of these conditions would make managing for the future in the agricultural industry difficult; their combination makes predictability and control impossible. Monsanto must develop leaders who can handle not only the science but also manage the complexity of multiplicity, interdependence, and ambiguity throughout the world – a real challenge.

FLUX: THE LAST STRAW

As if multiplicity, interdependence, and ambiguity were not enough on their own, the whole system is always in motion, always changing. And it seems to be changing at a faster rate all the time.

In the agriculture example above, long-term climate changes may influence how people think about genetic modification, but may also influence the effectiveness of the modifications themselves. In the shorter term, even seemingly unrelated crises like “mad cow” disease (BSE) and foot and mouth disease can influence how people think about the genetic modification of plants. In the petrochemical sectors, Shell and other companies must manage continual changes in governments and the relationships among countries (ranging from cartels to wars), scientific developments, consumer and industrial usage patterns, and even climate change. Telecoms companies were jostling for position with third-generation technology until market conditions and difficulties with technology made it clear that the launch of 3G was further away than they had anticipated. This realization required major restructuring and rethinking of current operations, especially after the bursting of the dot.com bubble left telecoms undercapitalized. With mergers, acquisitions, alliances, and divestments, former competitors can become partners, and former partners

can become competitors. Predicting the future with any certainty is impossible, and explanations of the past are not always reliable.

How can managers find the path to effectiveness in the midst of this complexity? If the world facing managers has become more diverse, more interdependent, more ambiguous, and is constantly changing, how do they cope? Executives told us that their companies had to be innovative, fast, and agile to compete globally. Borealis, a Danish specialty chemicals company, has even trademarked a description of the goal: Nimblicity™.⁴⁹ How is this achieved?

RESPONDING TO COMPLEXITY THROUGH PEOPLE AND PROCESSES⁵⁰

There would seem to be two straightforward alternatives for dealing with increased complexity: *amplification*, or the *elimination of input variety*. Elimination of variety is the reduction of input variety⁵¹ achieved by not being able or willing to see and understand the complexity in the environment impinging on the company, or by seeking or creating situations of certainty that executives think can be controlled, and thereby ignoring potentially high-impact external conditions, situations, and behaviors. Such ostrich-like behavior is not likely to bring success.

Amplification⁵² means increasing the number of decision-makers. Generally speaking, more decision-makers or team members lead to more variety. Yet mere amplification will not necessarily work. If, for example, executives operating out of a corporate headquarters in Norwich, Connecticut cannot generate the requisite variety in their decisions to match the variety existing in a global marketplace, simply increasing the size of the team may not work. If multiple decision-makers are highly homogeneous, with similar outlooks, a similar vested interest in the outcome, and reliance on the same selected sources for their information, their “sensory input” will be fooled. That is, they will think they are facing less variety than they actually are.⁵³

In organizations, the response to complexity generally has been a combination of amplification and elimination, through the use of structures and policies. Organizational structures have become more and more complex, with more managers, more multi-dimensional matrices and other organizational logics. British Petroleum was originally organized by country units, then by businesses first and geography second. With the acquisition of Amoco, it has since become organized using a complex set of principles, with some units geographic, some business-focused, and others customer- or function-focused. The more complex structures become, the more unwieldy they are. Moreover, they cannot always adapt quickly to new circumstances, since they are designed to fit a particular set of contingencies.

Companies may also develop complex sets of policies – either formally or informally – for managing different situations. Policies may cover marketing objectives, return on investment requirements, global compensation plans, and so on. However, the more the organization faces multiplicity, interdependence, and ambiguity, the more policies it needs and the more complex these policies need to be to cover all the important situations. And with flux, the policies must be changed continually.

This book presents the view that the appropriate response to complexity is through the deliberate development of *requisite variety*.⁵⁴ Simply, this means that the variety or multiplicity found in the environment can only be recognized, understood, and interpreted correctly by a matching condition of variety or multiplicity in the organization or, as Ashby said, “only variety can destroy variety.”⁵⁵ In human information-processing terms, development of requisite variety means that when there are complex, ambiguous inputs coming from the environment, organizational decision-makers must have the cognitive complexity, and firms need the organizational capacity, to notice these inputs and to process them.

To respond to today’s global complexity, organizations must shift the focus of response. Instead of structures and policies, the appropriate response to complexity today focuses on *processes* and *people*: the right people to decipher the informational content in the environment and appropriate organizational processes for managing the complexity and executing action plans. As Weick and Van Orden state: “globalization requires people to make sense of turbulence in order to create processes that keep resources moving to locations of competitive advantage.”⁵⁶ This suggests that the Buddha of people and process may need to receive greater emphasis, while the Hercules of amplification is rethought and perhaps receives less emphasis.

PEOPLE: THE WORLD ON THEIR SHOULDERS

There is no doubt that managing complexity places new requirements on the people who work in organizations affected by globalization. Talent acquisition and retention therefore become critical in developing the capacity to operate globally. Future global managers must be groomed and their competencies developed early in their careers. Executives told us that there was no time for training after discovering a certain competency was needed. They were moving too fast.

Managers must develop a global mindset. This means having the ability to develop and interpret criteria for personal and business performance that are not dependent on the assumptions of a single country, culture, or context; and to apply these criteria appropriately in different countries, cultures and contexts. Jack Welch called this the globalization of intellect: “The real challenge is to globalize the mind of the organization. . . . I think until you globalize intellect, you haven’t really globalized the company.”⁵⁷

Consider Lincoln Electric’s history of international growth. The company’s corporate culture of rugged individualism – with its origins in the Midwestern United States – shaped its early strategy for international development. When Lincoln transferred abroad, unchanged, its US manufacturing labor selection, compensation and incentive systems, it experienced limited success in markets that were similar to the United States, such as the UK, and Australia, and outright failure in others that were less similar, such as Indonesia and France. A new generation of internationally experienced (complex) top managers eventually emerged. These managers understood the extent to which the Lincoln Electric approach was dependent on its American context, and began to modify the company’s strategy, organization structure, and systems to allow for cultural and institutional differences. Then, Lincoln’s international business began to recover.⁵⁸

PROCESSES FOR RESPONDING DYNAMICALLY

High performance in a global environment requires conceptual and behavioral skills that result in action based on an accurate assessment of the context in which a firm finds itself. Effective global managers take into account not only the economic dimensions of globalization, but also contingencies including context and task as well as personal global competencies, effective teaming and leading, and the management of specific strategic initiatives. These are integrated to provide a more comprehensive view of globalization as a platform for sophisticated execution. Four types of processes are particularly critical to managing global complexity: collaborating, discovering, architecting, and systems thinking.

Collaborating is the establishment of relationships characterized by community, flexibility, respect, trust, and mutual accountability. When people and units collaborate effectively, they are more likely to see the reality and implications of multiplicity, manage interdependence for synergy, and explore different aspects of ambiguity. The relationships provide a continuing strength to confront dynamic complexity and provide a foundation for action.

New product development teams at Roche Pharmaceuticals often partner with people in other organizations to engage in basic science, conduct clinical trials, and develop and execute product launch strategies. The most effective of these teams collaborate to share and create knowledge and approaches that adapt to the environment as it changes.

Discovering is about learning and creating. It encompasses a set of transformation processes that lead to new ways of seeing and acting, which lead in turn to the creation of new knowledge, actions, and things. When organizational processes support and incorporate discovering, people explore multiplicity, experiment with interdependence, and articulate ambiguity. Continual discovering helps adapt to the constant flux found in the global marketplace.

Managers throughout the Dow Chemical Company, one of the world's largest chemical companies, are encouraged to engage in ongoing discovering. They learn about and create not just new chemical compounds and their uses, but also new ways of managing and working together. This discovering has led to a company-wide shift in strategy toward science solutions rather than their earlier focus on chemical solutions.

Architecting is the process of aligning and balancing. The mindful design of processes that align, balance, and synchronize the different parts of the organization provides a platform for coordinated responses to global complexity.

Most global financial services firms have grown through acquisition, leaving a structure of sometimes hundreds of locally autonomous units. In retail banking and insurance, decentralization allows for the local responsiveness that is critical. However, it does not encourage global integration and the accompanying learning effects and other synergies. As a result of decentralization, the firm as a whole may act as a holding company and may also risk missing local opportunities. Some firms are now experimenting with the systematic development of networks that cross the local units. These networks create webs of information sharing, informal policy alignment, learning, and adaptability, without adding complexity to the formal structure. Such networks do not arise spontaneously; they must be developed carefully, for example with joint projects on corporate issues,

executive education seminars, and new product or service initiatives for global clients. The networks must also be maintained consciously, not just with a website but also with ongoing, meaningful activities. The companies that have engaged in carefully architecting such networks are finding them a valuable tool for achieving global integration in an industry dominated by local responsiveness.

Systems thinking is the ability to see the interrelationships among components and levels in a complex system and to anticipate the consequences of changes in and to the system. In the terms we have been using, it is the ability to understand the external context of the firm and the interdependencies that exist with it, to understand the capabilities and weaknesses of the firm, and to constantly match and adjust the firm's capabilities and direction with the demands of the environment.

The processes of *collaborating*, *discovering*, *architecting*, and *systems thinking* are interrelated, and all are important for addressing complexity. None of these processes will address complexity effectively by itself.

Over a decade ago, C. K. Prahalad characterized the world of global business:

a world where variety; complex interaction patterns among various subunits, host governments, and customers; pressures for change and stability; and the need to reassert individual identity in a complex web of organizational relationships are the norm. This world is one beset with ambiguity and stress. Facts, emotions, anxieties, power, and dependence, competition and collaboration, individual and team efforts are all present. . . . Managers have to deal with these often conflicting demands simultaneously.⁵⁹

Prahalad saw the outline of globalization and described it accurately. In this book we intend to paint the picture in more detail with the broad strokes and bold colors required to bring it to life, and to understand its implications for global executives and their companies.

MANAGING GLOBALLY – OVERVIEW OF THE BOOK

This book articulates the repertoire of organizational processes and individual skills needed for managing complexity. There is no one best solution (structure, strategy, set of practices, etc.) for any one company, let alone for an industry or for all companies. Anyone who claims the opposite – who offers “the best way” – is eliminating input variety, thereby simplifying reality dangerously. But there is a set of organizational processes and personal characteristics that a company can use as a guide to find its own success as managers develop a good set of alternative paths, decide on an appropriate path, and move together along that path, changing paths as necessary, adjusting to the journey as they go. We think this focus on the process of the journey rather than the specific results brings Hercules toward Buddha.

The four remaining parts of this book articulate these processes, as well as the concepts that managers need to know in order to engage in them. The parts build on each other sequentially, creating a coherent statement of the system of effective global managing. As with any interdependent system, though, readers can enter the book at any chapter and move through it in any order, building their own pictures of how to respond to global complexity. A reader who begins with a chapter on a particular strategic initiative may be referred to a part of the global competency or

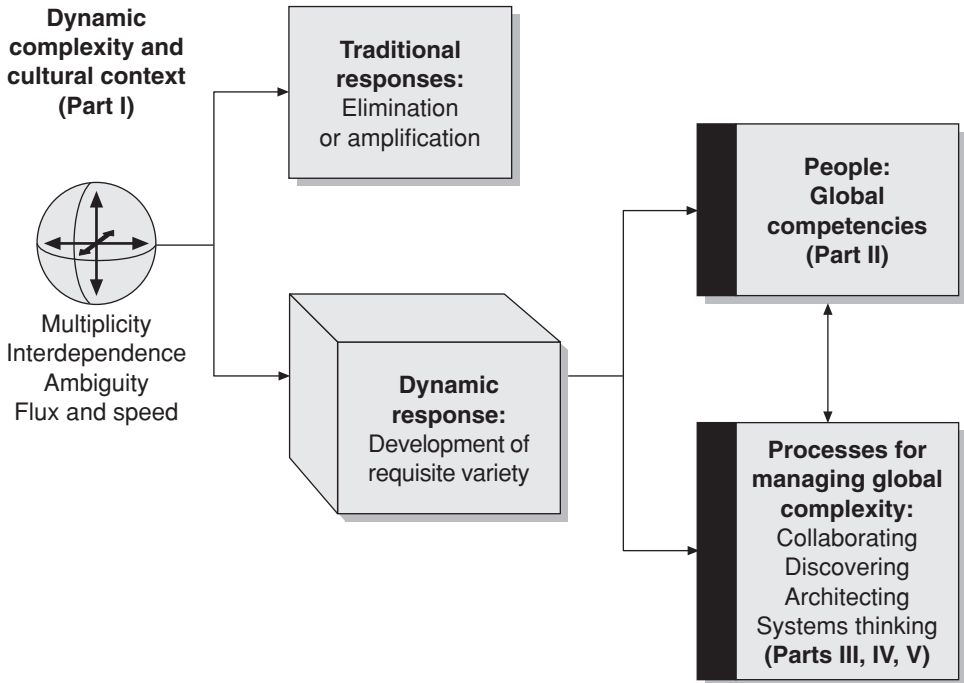


FIGURE 1.2 “Map” of the *Handbook*

context part of the book for more information, and a reader who begins with a chapter on building teams may be referred to other parts for depth on particular building blocks or applications. A “map” of the book is shown in figure 1.2.

This first part focuses on the context of global operations, recasting globalization as complexity to be managed with processes through the glue of people. In addition to this chapter on globalization, this part on context also has a background chapter examining culture. People and human processes are central to our approach to globalization, and culture is associated with multiplicity in social relationships and people’s expectations about interdependence, approaches to managing ambiguity, and responses to flux. The next chapter relates what we know about culture and its relationship to people in the context of globalization.

The second part examines the set of essential traits, attitudes, orientations, and skills required of all effective global managers, which we call “global competencies.”

The third part focuses on interaction processes among individuals in leading and teaming.

In the fourth part, we present approaches to a set of relevant strategic initiatives, and illustrate how to bring together context, individual competencies, and leading and teaming to execute strategy effectively.

The final part focuses on the particular challenge of emerging and developing economies. Although ideally this shouldn’t be a part all to itself, and one day it won’t be, these markets are still considered to be sufficiently different from what

most business executives are used to, so we think it helpful to address issues related to emerging and developing markets in a separate part.

The book concludes with a statement on creating knowledge about how to manage globally. It identifies the roles of managers and business academics in this process and provides suggestions for future collaboration.

As we conclude our introduction, we are reminded of the American journalist H. L. Menken's observation that "for every complex problem there is a simple solution. And it is always wrong." Our work suggests that as managers globalize their companies, they face an increasing complexity whose challenges require more than the simple solutions we have used until now. In order to address these challenges, challenges which this book explores, managers need to focus less on the specific solutions and think more about the managerial processes that address complexity. In fact, understanding globalization as a *manifestation* of complexity allows us to look at its causes, to move beyond the specific results on which we until now have been focused. Our approach suggests that Hercules and Buddha form an alliance.

NOTES

- 1 See, for example, How war will reshape the economy, *BusinessWeek*, April 14, 2003, pp. 29–31.
- 2 The postwar stakes for business, *BusinessWeek*, April 21, 2003, pp. 38–39.
- 3 Damage in the delta, *BusinessWeek*, April 21, 2003, pp. 56–57.
- 4 How war will reshape the economy, p. 30.
- 5 Nussbaum, B. (2003), Building a new multilateral world, *BusinessWeek*, April 21, p. 43.
- 6 The editors would like to thank Todd Weber for the figures in this Introduction.
- 7 <http://www.perseus.tufts.edu/Hercules/bio.html>
- 8 <http://www.perseus.tufts.edu/Hercules/labors.html>
- 9 Capra, F. (1984), *The Tao of Physics*. New York: Bantam Books.
- 10 This discussion of Buddhism and Taoism is based on Capra (1984).
- 11 Capra (1984), p. 95.
- 12 Korzybski, A. (1995), *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics*. 5th edn., New York: Institute of General Semantics.
- 13 Porter, O., & Steger, U. (eds.) (1998), *Discovering the New Pattern of Globalization*. Ladenburg: Ladenburg Kolleg, Daimler Benz Foundation.
- 14 Sachs, J. (2000), International economics: Unlocking the mysteries of globalization, in P. O'Meara, H. D. Mehlinger, & M. Krain (eds.), *Globalization and the Challenges of a New Century: A Reader*. Bloomington and Indianapolis: Indiana University Press, p. 217.
- 15 *World Investment Report 2000: Cross-border Mergers and Acquisitions and Development*. United Nations, New York and Geneva, p. xv.
- 16 *Ibid.*
- 17 *Ibid.*
- 18 See Hax, A. C., & Wilde, D. L. II (2001), *The Delta Project*. Basingstoke: Palgrave, for a discussion of these strategic options.
- 19 *Ibid.*
- 20 On July 15, 2002, Pfizer announced the purchase of Pharmacia; <http://apnews.excite.com/article/20020715/D7KPEVB80.html>
- 21 *World Investment Report 2000*, p. xx.

- 22 Hill, C. (2000), *International Business: Competing in the Global Marketplace*. 3rd edn., New York: Irwin McGraw-Hill, p. 5.
- 23 Rugman, A. M., & Hodgetts, R. M. (2000), *International Business: A Strategic Management Approach*. 2nd edn., Harlow: Financial Times Prentice Hall, p. 438.
- 24 Hill (2000), pp. 5, 7.
- 25 See Rugman, A., & Moore, K. (2001), The myths of globalization. *Ivey Business Journal*, September/October, 64–68 and Rugman, A. (2001), The myth of global strategy, *Insights* (Academy of International Business), 1(1), 11–14.
- 26 Rugman & Moore (2001).
- 27 These countries include the Netherlands, Belgium, Sweden, Norway, Denmark, Latvia, Lithuania, Estonia, Spain, Portugal, Poland, the Czech Republic, Slovakia, Brazil, Argentina, Chile, Peru, Paraguay, Guatemala, El Salvador, Honduras, Costa Rica, Nicaragua, Thailand, Malaysia, Indonesia and the United States; www.ahold.com
- 28 Prahalad, C. K., & Lieberthal, K. (1999), The end of corporate imperialism. *Harvard Business Review*, July–August, 69–79.
- 29 Bartlett, C. A., & Ghoshal, S. (1998), *Managing across Borders: The Transnational Solution*. 2nd edn., Boston: Harvard Business School Press, and Prahalad, C. K., & Doz, Y. L. (1987), *The Multinational Mission: Balancing Local Demands and Global Vision*. New York: The Free Press.
- 30 Kogut, B. (1985), Designing global strategies: Comparative and competitive value-added chains. *Sloan Management Review*, 26(4), 15–28.
- 31 Sachs (2000).
- 32 <http://www.schneider-electric.com>
- 33 Elliott, M. (2002), The anatomy of the GE–Honeywell disaster. *Time.com*, February 25; <http://www.time.com/time/business/article/0%2C8599%2C166732%2C00.html>
- 34 *Ibid.*
- 35 Steger, U. (2003), *Corporate Diplomacy*. New York: John Wiley, p. 51.
- 36 EU kills GE–Honeywell, *CNNMoney*, July 3, 2001; Steger (2003).
- 37 Einhorn, B., & Keenan, F. (2002), The great firewall of China. *Business Week*, September 23, and Fackler, M., China ends Google search block; <http://apnews.excite.com/article/20020912/D7M08TS00.html>
- 38 Thompson, J. D. (1967), *Organizations in Action*. New York: McGraw-Hill.
- 39 WTC claims could hit \$30B, *CNNMoney*, September 13, 2001; http://money.cnn.com/2001/09/13/news/insurance_wtc/index.htm
- 40 Lane, H. W., DiStefano, J. J., & Maznevski, M. L. (2000), *International Management Behavior*. 4th edn., Oxford: Blackwell.
- 41 Shaw, G., Brown, R., & Bromiley, P. (1998), Strategic stories: How 3M is rewriting business planning. *Harvard Business Review*, May–June, 41–50.
- 42 Sean Meehan, 2002, personal communication.
- 43 Wilson, M., & Lombard, R. (2001), Globalization and its discontents. *Ivey Business Journal*, September/October, 69–72.
- 44 Lubbers, E. (1998), The Brent Spar syndrome. *Telepolis*, September 22.
- 45 Weick, K. E., & Van Orden, P. (1990), Organizing on a global scale: A research and teaching agenda. *Human Resource Management*, 29(1), 49–61.
- 46 Senge, P. (1990), *The Fifth Discipline*. New York: Doubleday.
- 47 *Ibid.*
- 48 Genetic markets tempt more firms, *Industry Week*, July 7, 1980.
- 49 http://www.borealisgroup.com/public/about/hr/borealis_values.html
- 50 We would like to thank Professor Bert Spector of Northeastern University for his contribution to this part.

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- 51 Harnden, R., & Allenna, L. (eds.) (1994), *How Many Grapes Went into the Wine: Stafford Beer on the Art and Science of Holistic Management*, Chichester and New York: John Wiley, p. 135.
- 52 *Ibid.*, p. 16.
- 53 Beer, S. (1981), *Brain of the Firm: The Managerial Cybernetics of Organization*, Chichester and New York: John Wiley, p. 356.
- 54 Ashby, W. R. (1972), *Design for a Brain*, London: Chapman & Hall, and (1973) *Introduction to Cybernetics*, London: Chapman & Hall.
- 55 Ashby (1972), p. 207.
- 56 Weick & Van Orden (1990).
- 57 Rohwer, J., & Windham, L. (2000), GE digs into Asia. *Fortune*, October 2.
- 58 Hastings, D. F. (1999), Lincoln Electric's harsh lessons from international expansion. *Harvard Business Review*, 77(3), 162-178.
- 59 Prahalad, C. K. (1990), Globalization: The intellectual and managerial challenges. *Human Resource Management*, 29(1), 30.